

Abstract

A measured value (MAP\_MES) of the pressure in a suction pipe is the command variable of a control loop. The regulating variable is an estimated value (MAP\_EST) of the pressure in the suction pipe, said estimated value being determined  
5 according to the manipulated variable of the control loop. Said manipulated variable is calculated according to the difference between the estimated value (MAP\_EST) and a measured value (MAP\_MES) of the pressure in the suction pipe and according to the temporal change of the measured value (MAP\_MES) of the pressure in the suction pipe. An estimated value (MAF\_EST) of the mass flow in the intake passage (1) is  
10 calculated according to the manipulated variable.